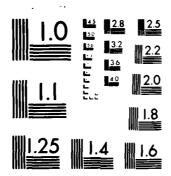
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March-April 1982



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#### BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS

No. 58

MARCH - APRIL 1982

Date of Report April 22, 1983

Vice Director for Foreign Intelligence Defense Intelligence Agency

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# 20. ABSTRACT

This is the Soviet Laser Bibliography for March-April 1982, and is No. 58 in a continuing series on Soviet laser developments. The coverage includes basic research on solid state, liquid, gas, and chemical lasers; components; nonlinear optics; spectroscopy of laser materials; ultrashort pulse generation; crystal growing; theoretical aspects of advanced lasers; and general laser theory. Laser applications are listed under biological effects; communications; beam propagation; computer technology; holography; laser-induced chemical reactions; measurement of laser parameters; laser measurement applications; laser-excited optical effects; laser spectroscopy; beam-target interaction; and plasma generation and diagnostics.

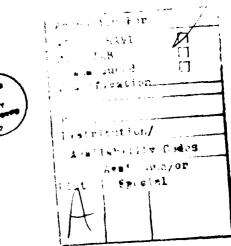
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### Introduction

This bibliography has been compiled under an interagency agreement as a continuing effort to document current Soviet-bloc developments in the quantum electronics field. The period covered is March-April 1982, and includes all significant laser-related articles received by us in that interval. The bulk of the entries come from the approximately 30 periodicals which are known to publish the most significant findings in Soviet laser technology. Citations from the Russian Reference Journals are also included. Laser items from the popular or semipopular press are generally omitted.

For convenience we have abbreviated frequently cited source names; a source abbreviations list and an author index are included. All sources cited with no parenthetical notation are available at the Library of Congress. A parenthetical entry (RZh, KL) indicates the secondary source in which the citation was found as a bibliographic entry or abstract, but for which the original source is not currently available at the Library. The authors' affiliations are indicated by the numbers in parentheses following the authors' names in the text and are listed in the Author Affiliations List. New affiliations are assigned a new number and are added to a cumulative list which includes all affiliations from 1969 to the present. Only those affiliations which appear in this issue are listed in this issue's Author Affiliations List.



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## II. LASER APPLICATIONS

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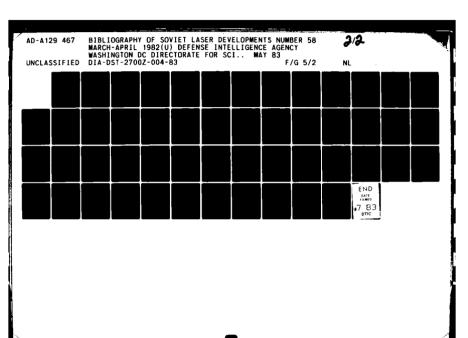
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# IV. SOURCE ABBREVIATIONS

(CIRC	Codens)
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APP	(APTLB)	Acta physica polonica
BWAT	(BWATA)	Biuletyn Wojskowej akademii technicznej J. Dabrowskiego
CCF	(CKCFA)	Ceskoslovensky casopis pro fyziku
CJP	(CZYPA)	Czechoslovak Journal of Physics
DAN B	(DBLRA)	Akademiya nauk Belorusskoy SSR. Doklady
DAN SSSR	(DANKA)	Akademiya nauk SSSR. Doklady
DAN Ukr	(DUKAB)	Akademiya nauk Ukrayins'koyi RSR. Dopovidi. Seriya A. Fizyko-matematychni ta tekhnichni nauky
DR	(DERUB)	Deponirovannyye rukopisi
FAiO	(IFAOA)	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana
FGiV	(FGVZA)	Fizika goreniya i vzryva
FiKhOM	(FKOMA)	Fizika i khimiya obrabotki materialov
FiKhS	(FKSTD)	Fizika i khimiya stekla
FM	(FNMKA)	Finommechanika, mikrotechnika [Hungary]
FTP	(FTPPA)	Fizika i tekhnika poluprovodnikov
FTT	(FTVTA)	Fizika tverdogo tela
IAN Arm	(IAAFA)	Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika
IAN B	(VABFA)	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IAN Est	(ETFMB)	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika, matematika
IAN Fiz	(IANFA)	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya
IAN Uz	(IUZFA)	Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk

I-FZh	(INFZA)	Inzhenerno-fizicheskiy zhurnal					
IT	(IZTEA)	Izmeritel'naya tekhnika					
IVUZ Fiz	(IVUFA)	Izvestiya vysshikh uchebnykh zavedeniy. Fizika					
IVUZ Priboro	(IVUBA)	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye					
IVUZ Radiofiz	(IVYRA)	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika					
JMO	(JMKOA)	Jemna mechanika a optika					
JTP	(JTPHD)	Journal of Technical Physics [Poland]					
KE	(KVEKA)	Kvantovaya elektronika					
KhVE	(KHVKA)	Khimiya vysokikh energiy					
KL	(KNLTA)	Knizhnaya letopis'					
KLDVAD	()	Knizhnaya letopis'. Dopolnitel'nyy vypusk. Avtoreferaty dissertatsii					
Kristal	(KRISA)	Kristallografiya					
KSpF	(KRSFA)	Kratkiye soobshcheniya po fizika					
NM	(IVNMA)	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy					
OiS	(OPSPA)	Optika i spektroskopiya					
OMP	(OPMPA)	Optiko-mekhanicheskaya promyshlennost'					
Opt app	(OPAPB)	Optica applicata [Poland]					
Otkr izobr	(OIPOB)	Otkrytiya, izobreteniya, promyshlennyye obraztsy, tovarnyye znaki					
PSS	(PSSAB) (PSSBB)	Physica Status Solidi (A). Applied Research (B). Basic Research					
PSU	(PRSUB)	Pribory i sistemy upravleniya					
PTE	(PRTEA)	Pribory i tekhnika eksperimenta					
RiE	(RAELA)	Radiotekhnika i elektronika					
RRP	(RRPZA)	Revue Roumaine de physique					

RZhF	(RZFZA)	Referativnyy zhurnal. Fizika
RZhMetrolog(RZMIB)		Referativnyy zhurnal. Metrologiya i izmeritel'naya tekhnika
RZhRadiot	(RZRAB)	Referativnyy zhurnal. Radiotekhnika
Sb1	sbornik	Elektronnaya promyshlennost', no. 5-6, 1981
Sb2		Wissenschaftliche Zeitschrift der Humboldt-Universitat zu Berlin, Mathematisch-naturwissenschaftliche, Reihe, no. 1, 1981
Sb3		Radiofizika i issledovaniya svoystv veshchestva, <i>O</i> msk, 1981
Sb4		15th International Conference on Phenomena in Ionized Gases. Minsk, 14-18 July 1981. Proceedings. Contributed papers. Part 2. Place and year of publication not given.
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Sb7		Povysheniye kachestva i dolgovechnosti slozhnykh sistem v mashinakh i oborudovanii metodami tekhnicheskoy diag- nostiki. Khabarovsk, 1981
Sb8		Studenticheskaya nauchno-tekhnicheskaya konferentsiya vuzov pribalticheskikh respublik, BSSR i MSSR. 25th. 21-23 April 1981. Tezisy dokladov. Vol. 1, Tallin, 1981
Sb9		Fizicheskiye protsessy v priborakh elektronnov i lazernov tekhniki. Moskovskiy fiziko-tekhnicheskiy institut. Mezhduvedomskiy sbornik. Moskva, 1981
Sb10		Fizika i tekhnologiya tonkikh plenok slozhnykh polu- provodnikov. Ukrainskaya respublikanskaya konferentsiya. 4th. Tezisy dokladov Uzhgorod, 1981
Sb11		Peredacha, priyem i obrabotka informatsii. Voronezh, 1981
Sb12		Nauchnaya konferentsiya molodykh uchenykh Kazakhskogo universiteta, posvyashchennoy 26 s"yezdu Kompartii Kazakh-

	stana, Alma-Ata, 15-17 Apr 1981. Trudy Kazakhskiy G U, Alma-Ata, 1981. Deposit at KazNIINTI, no. R304, 15 Dec 1981
Sb13	Poverkhnost'. Fizika, khimiya, mekhanika, no. 1, 1982
Sb14	Sovremennyye problemy matematicheskoy fiziki i vychis- litel'noy matematiki. Institut prikladnoy matematiki AN SSSR. Moskva, Nauka, 1982
Sb15	Izvestiya otdeleniya khimicheskikh nauk Bolgarskoy akademii nauk, no. 4, 1980
Sb16	Vsesoyuznoye soveshchaniye po uskoritelyam zaryazhennykh chastits. 7th. Dubna, 14-16 Oct 1980. Trudy. Ob"yedinennyy institut yadernykh issledovaniy, Dubna, 1981
Sb17	Fazirovannyye antennyye reshetki. Moskva, 1981
Sb18	Vsesoyuznyy simpozium po rasprostraneniyu lazernogo izlucheniya v atmosfere. 6th. Tezisy dikladov. Part 1. Institut optiki atmosfery SOAN. Tomsk, 1981
Sb19	Vsesoyuznoye soveshchaniye po radiometeorologii. 5th. Kishinev, 15-19 May 1978, Trudy. Moskva, Gidrometeoizdat, 1981
Sb20	Rasprostraneniye sveta v dipsersnoy srede. Institut fiziki AN BSSR. Minsk, Nauka i tekhnika, 1982
Sb21	Effektivnost' sistem obrabotki radiolokatsionnoy informatsii. Moskva, 1981
Sb22	Astrometriya i astrofizika, no. 42, 1980
Sb23	Issledovaniye vysokoshirotnoy ionosfery i magnetosfery zemli. Polyarnyy geofizicheskiy institut Kol'skogo filiala AN SSSR. Leningrad, Nauka, 1982
Sb24	Vychislitel'nyye sistemy, no. 84, Novosibirsk, 1981
Sb25	Fundamental'nyye osnovy opticheskoy pamyati i sredy, no. 12, Kiyev, 1981
Sb26	Izvestiya na NII po material'no-tekhnicheska baza kul'turata, no. 15, 1979
Sb27	Novyye elementy i metody rascheta informatsionnykh sistem. Moskva, 1980.
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Sb30	Elektronnaya promyshlennost', no. 7-8, 1981
Sb31	Vsesoyuznoye soveshchaniye "Eksperimental'nyye metody i apparatura dlya issledovaniya turbulentnosti." 4th. Novosibirsk, 30 Sep - 2 Oct 1981. Tezisy dok- ladov. Institut teplofiziki SOAN. Novosibirsk, 1981
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Sb34	Soveshchaniye po yadernoy spektroskopii i struktura atomnogo yadra, 32nd. Kiyev, 16-18 March 1982. Tezisy dokladov. Leningrad, Nauka, 1982
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Sb40	Acta Universitatis Palackianae Olomucensis. Facultas rerum naturalium. Physica, v. 65, 1980
Sb41	Konferentsiya molodykh uchenykh. 8th. Materialy. Geo-khimiya i poleznyye iskopayemyye. Moskovskiy G U, Moskva, 1981. Deposit at VINITI, no. 92-82, 7 Jan 1982
Sb42	Teoreticheskiye problemy khimicheskoy fiziki. Moskva, Nauka, 1982
Sb43	Diagnostika plazmy, no. 4/2, Moskva, 1981
Sb44	Ucheniye zapiski TsAGI, no. 5, 1981
Sb45	Elektronnaya tekhnika. Seriya 1. Elektronika SVCh, no. 3, 1981
Sb46	Tenth European Conference on Controlled Fusion and Plasma Physics, Moscow, 14-19 Sep 1981. Vol. 1. Contributed papers. Moskva, 1981.

SCF	(SCEFA)	Studii si cercetari de fizica
TiEKh	(ТЕКНА)	Teoreticheskaya i eksperimantal'naya khimiya
TiMF	(TMFZA)	Teoreticheskaya i matematicheskaya fizika
TKiT	(TKTEA)	Tekhnika kino i televedeniya
Tr1	Trudy	Kiyevskiy politekhnicheskiy institut. Vestnik. Radioelektronika, no. 18, 1981
Tr2		Fizicheskiy institut AN SSSR. Trudy, no. 132, 1982
Tr3		VNII monokristallov, stsintilyatsionnyk materialov i osobo chistykh khimicheskikh veshchestv, Sbornik nauchnykh trudov, no. 7, 1981
Tr4		Institut eksperimental'noy meteorologii. Gosudar- stvennyy komitet SSSR po gidrometeorologii i kontrolyu prirodnoy sredy. Trudy, no. 26/99, 1981
Tr5		Fizicheskiy institut AN SSSR. Trudy, no. 131, 1982
Tr6		Kiyevskiy G U. Vestnik. Fizika, no. 22, 1981
TVKE	(TVKED)	Tochnove vremya i kvantovaya elekronika
TVT	(TVYTA)	Teplofizika vysokikh temperatur
UFN	(UFNAA)	Uspekhi fizicheskiy nauk
UFZh	(UFIZA)	Ukrainskiy fizicheskiy zhurnal
VMU	(VMUFA)	Moskovskiy universitet. Vestnik. Fizika, astronomiya
ZhETF	(ZETFA)	Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhETF P	(ZFPRA)	Pis'ma v Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhFKh	(ZFKHA)	Zhurnal fizicheskoy khimii
ZhNiPFiK	(ZNPFA)	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii
ZhNKh	(ZNOKA)	Zhurnal neorganicheskoy khimii
ZhPMTF	(ZPMFA)	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki
ZhPS	(ZPSBA)	Zhurnal prikladnoy spektroskopii
ZhTF	(ZTEFA)	Zhurnal tekhnicheskoy fiziki
ZhTF P	(PZTFD)	Pis'ma v Zhurnal tekhnicheskoy fiziki
ZhVMMF	(ZVMFA)	Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki

#### V. AUTHOR AFFILIATIONS

- NS. Non-Soviet
- 0. Affiliation not given
- 1. Physics Institute imeni Lebedev, AN SSSR, Moscow (Fizicheskiy institut imeni Lebedeva AN SSSR).
- 2. Moscow State University (Moskovskiy gosudarstvennyy universitet).
- 3. Institute of Physics, AN BSSR, Minsk (Institut fiziki AN BSSR).
- 4. Physicotechnical Institute im Ioffe, Leningrad (Fiziko-tekhnicheskiy institut im Ioffe).
- 5. Institute of Physics, AN UkrSSR, Kiev (Institut fiziki AN UkrSSR).
- Institute of Semiconductors, AN UkrSSR, Kiev (Institut poluprovodnikov AN UkrSSR).
- 7. State Optical Institute im Vavilov, Leningrad (Gosudarstvennyy opticheskiy institut im Vavilova).
- 8. Radiophysics Scientific Research Institute at Gorkiy State University (NI radiofizicheskiy institut pri Gor'kovskom GU).
- Institute of Semiconductor Physics, Siberian Branch, AN SSSR, Novosibirsk (Institut fiziki poluprovodnikov Sibirskogo otdeleniya AN SSSR).
- 11. Kazan' State University (Kazanskiy GU).
- 12. Leningrad State University (Leningradskiy GU).
- Institute of Crystallography, AN SSSR, Moscow (Institut kristallografii AN SSSR).
- 15. Institute of Radio Engineering and Electronics, AN SSSR, Moscow (Institut radiotekhniki i elektroniki AN SSSR).
- Moscow Engineering Physics Institute (Moskovskiy inzhenerno-fizicheskiy institut).
- 17. Institute of Problems of Mechanics, AN SSSR, Moscow (Institut problem mekhaniki AN SSSR).
- 18. Institute of General and Inorganic Chemistry im Kurnakov, AN SSSR, Moscow (Institut obshchey i neorganicheskov khimii im Kurnakova AN SSSR).
- Moscow Power Engineering Institute (Moskovskiy energeticheskiy institut).
- 21. Acoustics Institute, AN SSSR, Moscow (Akusticheskiy institut AN SSSR).
- 23. Institute of Atomic Energy im Kurchatov, Moscow (Institut atomnov energii AN SSSR).
- 30. Leningrad Institute of Precision Mechanics and Optics (Leningradskiy institut tochnoy mekhaniki i optiki).
- 34. Khar'kov State University (Khar'kovskiy GU).
- 38. Kazan' Physicotechnical Institute (Kazanskiy fiziko-tekhnicheskiy
- 40. Tbilisi State University (Tbilisskiy GU).
- 41. Rostov-on-Don State University (Rostovskiy-na-Donu GU).
- 44. Institute of Applied Physics, AN MSSR, Kishinev (Institut prikladnoy fiziki AN MSSR).
- 45. Saratov State University (Saratovskiy GU).
- 47. Siberian Physicotechnical Institute im Kuznetsov, Tomsk (Sibirskiy fiziko-tekhnicheskiy institut im Kuznetsova).
- 49. Vilnius State University (Vil'nyusskiy GU).
- 51. Kiev State University (Kiyevskiy GU).
- 52. Joint Institute of Nuclear Research, Dubna (Ob"yedinennyy institut yadernykh issledovaniy).
- 53. Chernovtsy State University (Chernovitskiy GU).

- 59. Institute of Physics Research, AN ArmSSR (Institut fizicheskikh issledovaniy).
- 60. Institute of Physics, AN AzSSR (Institut fiziki AN AzSSR).
- 66. Institute of Solid State Physics, AN SSSR (Institut fiziki tverdogo tela AN SSSR).
- 67. Institute of Physics of Chemistry, AN SSSR (Institut khimicheskoy fiziki AN SSSR).
- 71. Institute of Applied Mathematics, AN SSSR (Institut prikladnoy matematiki AN SSSR).
- 72. Institute of Spectroscopy, AN SSSR (Institut spektroskopii AN SSSR).
- 74. Institute of High Temperatures, AN SSSR (Institut vysokikh temperatur AN SSSR).
- 75. Institute of Automation and Electronic Measurements, Siberian Branch, AN SSSR (Institut avtomatiki i elektrometrii SOAN).
- 77. Institute of Inorganic Chemistry, Siberian Branch, AN SSSR (Institut neorganicheskoy khimii SOAN).
- 78. Institute of Atmospheric Optics, Siberian Branch, AN SSSR (Institut optiki atmosfery SOAN).
- 79. Institute of Nuclear Physics, Siberian Branch, AN SSSR (Institut yadernoy fiziki SOAN).
- 82. Physicotechnical Institute, AN UkrSSR, Khar'kov (Fiziko-tekhnicheskiy institut AN UkrSSR).
- 84. Institute of Radiophysics and Electronics, AN UkrSSR (Institut radiofiziki i elektroniki AN UkrSSR).
- 86. Azerbaydzhan State University (Azerbaydzhanskiy GU).
- 87. Belorussian State University (Belorusskiy GU).
- 98. Institute of Nuclear Physics at Moscow State University (Institut yadernoy fiziki pri Moskovskom GU).
- 106. Kiev Polytechnic Institute (Kiyevskiy politekhnicheskiy institut).
- 109. Latvian State University (Latviyskiy GU).
- 110. Leningrad Electrotechnical Institute (Leningradskiy elektrotekhnicheskiy institut).
- 114. L'vov State University (L'vovskiy GU).
- 118. Moscow Physicotechnical Institute (Moskovskiy fiziko-tekhaicheskiy institut).
- 119. Moscow Institute of Electronic Engineering (Moskovskiy institut elektronnoy tekhniki).
- 122. Scientific Research Institute of Physicochemistry im Karpov (NI fiziko-khimicheskiy institut im Karpova).
- 132. Tomsk State University (Tomskiy GU).
- 133. Central Aerohydrodynamic Institute im Zhukovskiy (Tsentral'nyv aerogidrodinamicheskiy institut im Zhukovskogo).
- 137. Voronezh State University (Voronezhskiy GU).
- 140. All Union Scientific Research Institute of Physicotechnical and Radiotechnical Measurements (VNII fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy).
- 148. Institute of Terrestrial Magnetism, the Ionosphere and Radiowave Propagation, AN SSSR (Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln AN SSSR).
- 159. Institute of Thermophysics, Siberian Branch, AN SSSR, Novosibirsk (Institut teplofiziki SOAN).
- 161. Moscow Institute of Radio Engineering, Electronics and Automation (Moskovskiy institut radiotekhniki, elektroniki i avtomatiki).
- 163. All Union Scientific Research Institute of Metrology im Mendeleyev (VNII metrologii im Mendeleyeva).
- 176. Moscow Geological Prospecting Institut im Ordzhonikidze (Moskovskiy geologorazvedochnyy institut im Ordzhonikidze).

- 181. Institute of Nuclear Research, AN UkrSSR, Kiev (Institut yadernykh issledovaniy AN UkrSSR).
- 188. All Union Scientific Research Institue of Single Crystals, Scintillation Materials and Extra Pure Chemical Substances, Khar'kov (VNII monokristallov, stsintillyatsionnykh materialov i osobo cheistykh khimicheskikh veshchesty).
- 193. Institute of Theoretical and Applied Mechanics, Siberian Branch, AN SSSR, Novosibirsk (Institut teoreticheskoy i prikladnoy mekhaniki SOAN).
- 202. Institute of Electronics, AN UzSSR, Tashkent (Institut elektroniki AN UzSSR).
- 206. Institute of Geology and Geophysics, Siberian Branch, AN SSSR, Novosibirsk (Institut geologii i geofiziki SOAN).
- 210. Institute of Physics, Siberian Branch, AN SSSR (Institut fiziki SOAN).
- 213. Leningrad Technological Institute (Leningradskiy tekhnologicheskiy institut).
- 218. Second Moscow State Medical Institute im Pirogov (Vtoroy Moskovskiy meditsinskiy institut im Pirogova).
- 220. Institute of Experimental Meteorology (Institut eksperimental nov meteorologii).
- 231. Scientific Research Institute of Motion Pictures and Photography (NI kinofotoinstitut).
- 242. Kazakh State University, Alma Ata (Kazakhskiy GU).
- 248. Institute of Mechanics at Moscow State University (Institut mekhaniki pri Moskovskom GU).
- 252. Leningrad Institute of Nuclear Physics, AN SSSR (Leningradskiy institut yadernoy fiziki AN SSSR).
- 276. Institute of Physics of the Earth im Shmidt, AN SSSR (Institut fiziki Zemli im Shmidta AN SSSR).
- 299. Institute of Electronics, AN BSSR (Institut elektroniki AN BSSR).
- 307. Institute of Thermophysics and Electrophysics, AN EstSSR (Institut termofiziki i elektrofiziki AN EstSSR).
- 313. Scientific Research Institute of Applied Physics at Irkutsk State University (NII prikladnoy fiziki pri Irkutskom GU).
- 325. Scientific Research Institute of Physics, Rostov-on-Don (NII fiziki, Rostov-na-Donu).
- 326. Institute of Radioelectronics, AN SSSR (Institut radioelektroniki AN SSSR).
- 332. Frunze Polytechnic Institute (Frunzinskiy politekhnicheskiy institut).
- 336. Scientific Research Institute of Nuclear Physics, Electronics and Automation at Tomsk Polytechnic Institute (NII yadernoy fiziki, elektroniki i avtomatiki pri Tomskom politekhnicheskom institute).
- 390. Novosibirsk Electrotechnical Institute of Communications (Novosibirskiy elektrotekhnicheskiy institut svyazi).
- 395. Scientific Research Institute of Introscopy (NII introskopii).
- 396. "Optika" Special Design Bureau for Scientific Instrument Manufacture, Siberian Branch, AN SSSR (Spetsial'noye konstruktorskove byuro nauchnogo priborostroyeniya "Optika" SOAN).
- 411. Krasnoyarsk State University (Krasnoyarskiy GU).
- 426. Institute of Applied Physics, AN SSSR, Gor'kiy (Institut prikladnoy fiziki AN SSSR).
- 438. Ryazan' State Pedagogical Institute (Ryazanskiy gos pedagogicheskiy institut).
- 445. All Union Scientific Research Institute of the Metrological Service, Moscow (VNII metrologicheskiy sluzhby).

- 451. All Union Correspondence Institute of the Textile and Light Industry, Moscow (Vsesoyuanyy zaochnyy institut tekstil'noy i legkoy promyshlennosti).
- 506. Institute of Physics, AN LitSSR (Institut fiziki AN LitSSR).
- 507. Institute of Solid State and Semiconductor Physics, AN BSSR, Minsk (Institut fiziki tverdogo tela i poluprovodnikov AN BSSR).
- 511. Institute of Applied Problems in Mechanics and Mathematics, AN UkrSSR, L'vov (Institut prikladnykh problem mekhaniki i matematiki AN UkrSSR).
- 512. Institute of General and Inorganic Chemistry, AN UkrSSR, Kiev (Institut obshchey i neorganicheskoy khimii AN UkrSSR).
- 521. Scientific Research Institute for Physics of Condensed Media, Yerevan State University (NII fiziki kondensirovannykh sred Yerevanskogo GU).
- 534. Institute of Physics, Dagestan Branch, AN SSSR (Institut fiziki Dagestanskogo filiala AN SSSR).
- 565. Institute of Theoretical and Experimental Physics, Moscow (Institut teoreticheskoy i eksperimental noy fiziki).
- 580. Astronomical Observatory of the Odessa State University (Astronomicheskaya observatoriya Odesskogo GU).
- 586. Bashkir State University, Ufa (Bashkirskiy GU).
- 587. Vitebsk Branch of the Institute of Solid State and Semiconductor Physics, AN BSSR (Vitebskoye otdeleniye instituta fiziki tverdogo tela i poluprovodnikov AN BSSR).
- 626. All Union Scientific Research Center for Studying Properties of Surfaces and Vacuums, Moscow (VNI tsentr po izucheniya svoystv poverkhnosti i vakuuma).
- 627. Kubyshev Branch of the Physics Institute, AN SSSR (Kuybyshevskiy filial Fizicheskogo instituta AN SSSR).
- 628. All Union Scientific Research Institute of the Cable Industry, Moscow (VNII kabel'noy promyshlennosti).
- 630. Radium Institute im Khlopin (Radiyevyy institut im Khlopina).
- 666. Perm' Pharmaceutical Institute (Permskiy farmatsevticheskiy institut).
- 667. Leningrad Institute of Water Transportation (Leningradskiy institut vodnogo transporta).
- 668. Leningrad Technological Institute of the Cellulose and Paper Industry (Leningradskiy tekhnologicheskiy institut tsellulozno-bumazhnoy promyshlennosti).
- 669. Institute of Electronics and Computer Engineering, AN LatSSR, Riga (Institut elektroniki i vychislitel'noy tekhniki AN LatSSR).
- 670. Central Scientific Research Institute of Dermatology and Venereology, Moscow (Tsentral nyy NI kozhno-venerologicheskiy institut).
- 671. All Union Scientific Center of Surgery, AMN SSSR, Moscow (Vsesoyuznyy nauchnyy tsentr khirurgii AMN SSSR).
- 673. Saratov State Pedagogical Institute (Saratovskiy gos pedagogicheskiy institut).
- 674. Fergana Polytechnic Institute (Ferganskiy politekhnicheskiv institut).

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CARLHOFF C CHABAN N G CHADYUK V A CHALYY V P CHAMOROVSKIY YU K CHAPLIK A V CHAPLIK A V CHAPROVSKIY A P CHEBOTAYEV V P CHECHENINA YE P	108 99 26 5 29 28 58 77,102	DIANOV YE M 44. DIDENKO A N DIDYUKOV A I DINESCU M DIVAK V B DMITRIYEV A YA DMITRIYEV N V DMITRIYEV V G DMITRIYEV YU YU DNEPROVSKIY V S	.45,46,78 22 28 111 97 64 90 2 33	FAZLAYEV V RH FEUORCHENKO A M FEUOROV A A FEUOROV G M FEUOROV N F FEUOROV V A FEDOROV YE G FEUOROVA L S FEUOROVA L V FEUOROVA A	11,25 42 92 103 2 8 46 59 52 79
CARLHOFF C CHABAN N G CHADYUK V A CHALYY V P CHAMOROVSKIY YU K CHAPLIK A V CHAYKOVSKIY A P CHEBOTAYEV V P	108 99 26 5 29 28 77,102 81	DIANOV YE M 44. DIDENRO A N DIDYUROV A I DINESCU M DIVAR V B DMITRIYEV A YA DMITRIYEV N V DMITRIYEV V G DMITRIYEV YU YU DNEPROVSKIY V S DOBRYSHIN V YE	.45,46,78 22 28 111 97 64 98 2 33 98	FAZLAYEV V RH FEDORCHENKO A M FEDOROV A A FEDOROV G M FEDOROV V A FEDOROV V A FEDOROV L S FEDOROVA L V FEDOROVA L V FEDOROVA A FEDULOVA S P	11,25 42 92 103 2 8 46 59 52 79
CARLHOFF C CHABAN N G CHADYUK V A CHALYY V P CHAMOROVSKIY YU K CHAPLIK A V CHAPLIK A V CHAPROVSKIY A P CHEBOTAYEV V P CHECHENINA YE P	108 99 26 55 29 28 58 77,102 81 81	DIANOV YE M 44. DIDENKO A N DIDYUKOV A I DINESCU M DIVAK V B DMITRIYEV A YA DMITRIYEV N V DMITRIYEV V G DMITRIYEV YU YU DNEPROVSKIY V S DOBKYSHIN V YE DOKTOROV YE V	.45,46,78 22 28 111 97 64 98 2 33 98 96 68	FAZLAYEV V RH FEUORCHENKO A M FEUOROV A A FEUOROV G M FEUOROV V A FEUOROV V A FEUOROV L S FEUOROVA L V FEUOROVA L V FEUOROVA A FEUULOVA S P FEOKTISTOV L P	11,25 42 92 103 2 8 46 59 52 79
CARLHOFF C CHABAN N G CHADYUK V A CHALYY V P CHAMOROVSKIY YU K CHAPLIK A V CHAPLIK A V CHAPOTAYEV V P CHECHENINA YE P CHEKALINSKAYA YU	108 99 26 5 29 28 77,102 81	DIANOV YE M 44. DIDENRO A N DIDYUROV A I DINESCU M DIVAR V B DMITRIYEV A YA DMITRIYEV N V DMITRIYEV V G DMITRIYEV YU YU DNEPROVSKIY V S DOBRYSHIN V YE	.45,46,78 22 28 111 97 64 98 2 33 98	FAZLAYEV V RH FEDORCHENKO A M FEDOROV A A FEDOROV G M FEDOROV V A FEDOROV V A FEDOROV L S FEDOROVA L V FEDOROVA L V FEDOROVA A FEDULOVA S P	11,25 42 92 103 2 8 46 59 52 79
CARLHOFF C CHABAN N G CHADYUK V A CHALYY V P CHAMOROVSKIY YU K CHAPLIK A V CHAPLIK A V CHAPBOTAYEV V P CHECHENINA YE P CHEKALINSKAYA YU CHEPUR D V	108 99 26 5 29 28 58 77,102 81 81 96 27,95	DIANOV YE M 44. DIDENKO A N DIDYUKOV A I DINESCU M DIVAK V B DMITRIYEV A YA DMITRIYEV N V DMITRIYEV V G DMITRIYEV YU YU DNEPROVSKIY V S DOBKYSHIN V YE DOKTOROV YE V	.45,46,78 22 28 111 97 64 98 2 33 98 96 68	FAZLAYEV V RH FEUORCHENKO A M FEUOROV A A FEUOROV G M FEUOROV V A FEUOROV V A FEUOROV L S FEUOROVA L V FEUOROVA L V FEUOROVA A FEUULOVA S P FEOKTISTOV L P	11,25 42 92 103 2 8 46 59 52 79 11
CARLHOFF C CHABAN N G CHADYUK V A CHALYY V P CHAMOROVSKIY YU K CHAPLIK A V CHAYKOVSKIY A P CHEBOTAYEV V P CHECHENINA YE P CHEKALINSKAYA YU CHEPUR D V CHEPURNOY V A	108 99 26 5 29 28 58 77,102 81 81 96 27,95	DIANOV YE M 44. DIDENKO A N DIDYUKOV A I DINESCU M DIVAK V B DMITRIYEV A YA DMITRIYEV N V DMITRIYEV V G DMITRIYEV YU YU DNEPROVSKIY V S DOBKYSHIN V YE DOKTOROV YE V DOL'DORT V G	45,46,78 22 28 111 97 64 98 2 33 98 96 68 77	FAZLAYEV V KH FEUORCHENKO A M FEUOROV A A FEUOROV G M FEUOROV N F FEUOROV V A FEUOROV YE G FEUOROVA L S FEUOROVA L V FEUOROVA L V FEUOROVA S FEUULOVA S FEUULOVA S FEUULOVA S FEUULOVA S FEORTISTOV L FERTIK N S	11,25 42 92 103 2 8 46 59 52 79 11 112

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GALAKTIONOV V V	48	GOVURURHINA T A	27	IVANOV S N	104
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GAVRILOV V	21	GUKOV G B	45	_	
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	44	HARSANY AL	111	KAPERKO V P	89
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KASHNIKOV N G	10.15	RT.TNRIJV V R	21	KOSAREV T T	80
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KATSEV I L	52	RLUCHRU A I	10	KOSTECKI J	109
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KAIUSHKIN V A	0.0	KLIUIEV IU A	97	KOSTRZEWA T	25
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KAZAKOV S A	67	KNYAZEV I. N	7.8	KOTI.YAROV R P	24
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KHUDOLEYEV A V	76	KONDRAHOV V N	77	KRASNENKU N P	32
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KULIK P P	111	LEVCHENKO YE B	90	MALASHIN M S	54
KULTKOV S M	770	LEVCHIK VE A	25	MALDURITS E K	103
FULLE OF SU	30	TEMPANOPTU II II	10	MAT. PRITCH N A	21
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KULIKOV YU V	11	LEVIN G G	62,74	MALISER V	70
KULIKOVSKAYA N I	80	LEVIT A L	41	MALKOV A V	2/
KULIPANOV G N	40	LEVIT B I	5	MALOV S N	6.4
KULYSHEV A V	80	LEVSHIN L V	7	MALOV V V	46
KUNITSYN V YE	64	LEVYY S V	46	MALYKH N I	81
KUPKO V S	48	LEYPUNSKIY I O	68	MALYUTENKO V K	28
KUPRIYANOV S YE	72	T.THENSON M N	103.114	MALVIIIITN A A	3.7
FURASHOV V N	62.81	TIMBACURY W	102,114	MAMAYEV A V	24 52 59
FIDDAMAN A T	4 04	DIRACALV V N	110	MAMBRIT I D	11
RURDATUV A L	4,74	LINEV A F	110	MAMEDUI L D	11
KURBATOV A V	8	LINNIK L F	28	MAMEDOV R K	81
KUROCHKINA T N	25	LIOZNOV A G	111	MAMONOV V K	59
KURUNOV R F	22.87	LIPSKAYA O A	53	MANAKOV S V	41
KURZYNA J	109	LIPTUGA A I	28	MANKEVICH S K	24
KUSHNIR V R	34	LISITSKIY I S	ΔÄ	MANSUROV G M	81
RUSHTIN T F	113	T.T.C.TTCVN V N	20	MANYKIN E A	91
FIICDAVEV VII C	40	TINUSTRAL B UR	30	MADCOAY 1	7.6
FULL CAP A A	70	DISTANSALI D IE	01	MANCOLIN C	คา้
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KUZ MENKO V A	68	LITVINENKO V N	40	MARKOV V S	/6
KU4'MENKO V I	85	LIV5HITS G SH	48,51,54	MARKUVA S V	15
KUZ'MIN P P	79	LOBANOV B D	27	MARKUSHEV V M	2
RUZNETSOV A I	98	LOGOZINSKIY V N	81	MART'YANOV A N	46,47
KUZNETSOV A N	104	LORSHIN M M	105	MARTYNOVA T A	46.47
KUXNETSOV I M	85	LORUVIISHIN A A	101	MARTYNOVICH VE F	98
KII NETCOV V A	110	TOMONOCON IN IN	0.2	MADICIN A M	22
PURNEMONI U M	110	LOMONOSOV V V	93	MACATIN A N	02
RUBNETSOV V M	0.1	LOPATIN V N	54	MAGALOV A V	02
KUZNETSOV V V	3 /	LOSEV V F	23	MASHAKOVA S M	99
KUZNETSOVA L YA	32	LOSEVA T V	54	MASHKO V V	100
KUZNETSOVA T I	35	LOTKOVA E N	13	MASLYANKIN V A	3
KVAPIL J	1	LOYA V YU	25	MASYCHEV V I	13
KVAPIL JOS	1	LUGOVSKUY V B	101,105	MATOUS J	82
KVASOV N T	83	LUKASHENKO V I	91	MATRAS E	9
KVITSINSKIY V A	91	LURASHOV I L	2	MATROSOV V N	38
KYAZYM-ZADE A G	ź7	LUKIN Z A	79	MATSKO M G	89
KINDIN BAGE A G	0,				91
•		LUK'YANCHUK B S	60.101	MATVIYCHUK A S	
Ĺ		LUK'YANOV D P	81	MATYUGIN YU A	77
		LUK'YANOV G A	19	MATYUK V M	68
LAATS M K	116	LUNIN N V	76	MAYEVSKIY S M	33
LVRADY V V	77	LUTOSHKIN V I	63	MAYMISTOV A I	64,65,91
LADA A V	25	LUTSET M K	62	MAYOROV S A	95
LAKHIN L N	79	LUT2 F	3	MAZAKOVA M YU	66
LAMDEN K S	53				74
		LYABIN N A	75	MAZALOV I N	
LANGE W	79	LYAKHOV G A	8	MAZAN'KO I P	.18
LAPRUN I R	43	LYAMSHEV L M	59	MAZHUKIN V I	111
LAPTEV V A	97	Lyashenko n n	79	WEDVED' V V	104
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LARIN YU T	46	LYKOV V A	109	MELEKHOV P V	81
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MEL INTCHIN V VII	110	MUCA C	111	NTETOTN D T	110
MED MICHUR V 10	110	MUSA G	717	MINITIM F I	110
WET. NIKOA N Y	72	MUSAYEV M A	28	NIKITIN S YU	31
MEL'NIKOV V YE	49	MUSIYENKO G N	99	NIKITIN V V	5,9
MESHKOVSKIY T K	7	MUCTARIN F C	24	NIKITIN YE P	45.78
MEZENTCEV N A	ı á	MICOLATIN N S	111	NIKOLAVEV E A	100
MINITED OF THE	40	MUSTAFIN R I	117	NIKODNIDV I N	100
MIHAILESCU I N	100,103,111	MYAGI U O	80	NIKOLAYEV G YE	3/
MIKAELYAN A L	62	MYAGKOV S A	41	NIKOLNYEV V D	6,38
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MIKHALEVICH S P	90			NIKOD SKII I K	15
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MINUMPON 10 I	0.0	NVDTIEA K L		NOUTE C H	77
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MIKHNOV S A	95	NADEZHDINSKIY A I	48,98	NOVIKOV A G	81
MIKLA V I	92	NAGAYEV A I	24,62	NOVIKOV B V	93
MILEVSKIY YE		NAGIHINA T M	66.86	NOVIKOV M A	98
ICER MILEWERT	11	NAGORNYY A G	81	NOVIKOV N P	103
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MILEWSKI J	10,23	NAGRADA S	109	MOATKOA 2 2	10
WILJEVIC V	14	NAGULIN YU S	73	NOVIKOV V P	98
MIL'SHTEYN B G	26	NAKHODKIN N G	62	NOVIKOV YU M	85
MINAKOV A A	92	NAKU I M	55	NOVIKOVA N N	103
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MINOGIN A G	92	NALETOV A M	97	NO VOSELOV A N	40
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MIRONOS A V	04,65	NAUGOL'NYKH K A	29	ODULOV & G	0.5
MIRONOV N T	54	NAUMENKOV P A	77	OKUROKUV V V	37
MIRONOV V L	54,55	NAUMOV A V	7	OLEYNIK I S	70
MIROV S B	2.88	NAUMOV V I.	1	OM A E	14
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MISHACHEV V N	88	NAYUROV A YA	10	OREKHOVA V P	38
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MINICE IN U VE	41/4	MANAGARA A	105	OPI OV V A	96
MNUSKIN V IE		NAZAROV A N	103	OKLOV V A	• • •
MOGIL NITSKIY S E	51,61	NAZAROV V D	33,46	ORLOV YE P	19
MOISEYEV M B	39	NAZAROV YU G	93	ORLOVA N D	98
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MOZGO A A	23	NICOLAU-REBIGAN S	82	PACHEVA Y	10
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MUEHLBERG M	74	NIECHODA Z	28		
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MURAV-YEV T T	10	NIKIFOROV V G	7,48	PANCHENKO M V	55
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PASYUK A S	106	POLUERTOV I A 4,2	RAKHOVSKIY V I 96
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SUROVEGIN A D	36	TOLOKNOV N A	72	USPENSKAYA M YE	98
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SUTORIKHIN I A	50	TOLSTOROZHEV G B	38	ITVAROVA T V	40
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